Exhibit 300: Capital Asset Summary

Part I: Summary Information And Justification (All Capital Assets)

Section A: Overview & Summary Information

Date Investment First Submitted: 2009-06-30
Date of Last Change to Activities: 2012-06-26
Investment Auto Submission Date: 2012-02-27
Date of Last Investment Detail Update: 2012-02-27
Date of Last Exhibit 300A Update: 2012-08-23
Date of Last Revision: 2012-08-23

Agency: 021 - Department of Transportation **Bureau:** 12 - Federal Aviation Administration

Investment Part Code: 01

Investment Category: 00 - Agency Investments

1. Name of this Investment: FAAXX713: NextGen NAS Voice System (NVS)

2. Unique Investment Identifier (UII): 021-391613792

Section B: Investment Detail

1. **Provide a brief summary of the investment, including a brief description of the related benefit to the mission delivery and management support areas, and the primary beneficiary(ies) of the investment. Include an explanation of any dependencies between this investment and other investments.**

Future air traffic operations as envisioned by the Next Generation (NextGen) Air Transportation System will require a new flexible networkable voice communications system with flexible networking capabilities. Needs have been identified for: efficient use of communications resources to reduce acquisition and support costs; elimination of constraints on expansion of capacity and supportability imposed by parts obsolescence and diminishing manufacturing sources; support of dynamically defined airspace; maintenance of business continuity in the event of a loss of a facility; elimination of architectural constraints on system capacity; and increased sophistication of system security to counter threats. Currently, thirteen different switches are used in the NAS and many are already experiencing severe obsolescence issues. Technical refresh can sustain the Enroute Voice Switching and Control Systems (VSCS) for the near term but a new switch system is needed to alleviate supportability issues. Also, current voice switches are not network enabled and cannot be modified for installation in new facilities resulting from NextGen. The National Airspace System (NAS) Voice System (NVS) is the key voice communication component for the NextGen System to satisfy these needs and NVS has been identified as a key enabling program for NextGen. The NVS is currently in a planning phase. A Federal Aviation Administration (FAA) Executive Council (EC), sub-board to the Joint Resource Council (JRC); Investment Analysis Readiness Decision took place in September 2007. A strategy brief was

presented to the JRC in July 2010 in place of an Initial Investment Decision (IID) as previously planned. At this strategy JRC, the IID was waived and segmentation of the program was defined. Since the IID was waived, analysis supporting many of the performance measurements was not completed and performance measurements for FY09-10 were not met. Subsequent budget cuts of $130.2M from the passback for FY12-16 led to restructuring the planned approach. During this first segment, several demo and test systems will be procured, but not deployed. A Final Investment Decision (FID) is planned for FY15 prior to system deployment. This program has dependencies with Next Generation Air/Ground Communications Segment 1a and Segment 2, FAA Telecommunications Infrastructure, Voice Switching and Control System, and Alaskan Satellite Telecommunications Infrastructure.

2. **How does this investment close in part or in whole any identified performance gap in support of the mission delivery and management support areas? Include an assessment of the program impact if this investment isn't fully funded.**

FAA has established an operational plan for the Air Traffic Management (ATM) system of the twenty-first century. This plan, reflected in the Concept of Operations for NextGen, will restructure the NAS. These concepts will involve new rules and regulations governing the use of airspace, new technologies that enable air traffic services, new airspace structure, and dynamics for adapting the NAS to meet user needs. At the same time, NAS voice communications infrastructure continues to age and operational analyses continue to identify opportunities to co-locate or consolidate facilities. Needs associated with these changes are addressed in the FAA Flight Plan goals and objectives, Strategic Management Plan objectives, and the NAS Enterprise Architecture. To provide Air Traffic Control (ATC) voice communication services the NVS will be needed. In both the near and long term, the NVS will provide solutions for the efficient use of communications resources to reduce acquisition and support costs, as well as eliminate the constraints on expansion of capacity and supportability imposed by parts obsolescence and diminishing manufacturing sources. As the NAS evolves toward the future defined by the NextGen concept, the need for voice communication will be reduced but will not be eliminated. The NVS will therefore address both current needs while evolving the infrastructure toward the future. The NVS will provide a common platform for voice communications that complements the evolving data communications infrastructure that will be used to an increasing degree to accomplish tasks previously allocated to voice communications. By providing new network enabled voice switches throughout the NAS, NVS supports the DOT Strategic Plan goal of maintaining operational availability of the NAS at 99.7 percent, and also supports the similar FAA Destination 2025 goal of Optimizing Airspace and Performance Based Management Procedures to improve efficiency an average of 10% across Core Airports by 2018. If NVS is not fully funded and the old switches remain in place for an extended period of time, voice communication in the NAS will be subject to equipment obsolescence issues and failures, and the current architectural constraints on system capacity will persist.

3. **Provide a list of this investment's accomplishments in the prior year (PY), including projects or useful components/project segments completed, new functionality added, or operational efficiency achieved.**

In the PY, NVS has released the strategy paper for industry comment, and also requested industry comments on the draft technical specifications. Other accomplishments include conducting the Voice over IP (VoIP) interoperability tests, as well as providing an updated

briefing to the JRC, and the release of a draft of the Screening Information Request (SIR) for industry comment. These accomplishments over the last year have positioned NVS for future success in the upcoming budget year.

4. **Provide a list of planned accomplishments for current year (CY) and budget year (BY).**

In the current year, NVS plans to incorporate the industry comments into the SIR, as well as complete the system specification. Once complete, the plan will be available for financial review and eventual approval. The SIR will then be released to the industry and NVS will conduct evaluations on all the returning proposals. Once a proposal has been accepted, NVS will award a contract to acquire test systems in order demonstrate NextGen capabilities and have a production-ready system for deployment to any target environment. By mid BY13, NVS plans to have accepted delivery of the test systems and will begin to verify production requirements.

5. **Provide the date of the Charter establishing the required Integrated Program Team (IPT) for this investment. An IPT must always include, but is not limited to: a qualified fully-dedicated IT program manager, a contract specialist, an information technology specialist, a security specialist and a business process owner before OMB will approve this program investment budget. IT Program Manager, Business Process Owner and Contract Specialist must be Government Employees.**

2015-07-01

Section C: Summary of Funding (Budget Authority for Capital Assets)

1.

Table I.C.1 Summary of Funding

	PY-1 & Prior	PY 2011	CY 2012	BY 2013
Planning Costs:	$40.0	$4.0	$9.0	$10.0
DME (Excluding Planning) Costs:	$0.0	$0.0	$0.0	$0.0
DME (Including Planning) Govt. FTEs:	$3.4	$1.1	$1.2	$1.3
Sub-Total DME (Including Govt. FTE):	$43.4	$5.1	$10.2	$11.3
O & M Costs:	$0.0	$0.0	$0.0	$0.0
O & M Govt. FTEs:	$0.0	$0.0	$0.0	$0.0
Sub-Total O & M Costs (Including Govt. FTE):	0	0	0	0
Total Cost (Including Govt. FTE):	$43.4	$5.1	$10.2	$11.3
Total Govt. FTE costs:	$3.4	$1.1	$1.2	$1.3
# of FTE rep by costs:	25	8	8	8
Total change from prior year final President's Budget ($)		$0.0	$-10.8	
Total change from prior year final President's Budget (%)		0.00%	-51.45%	

2. If the funding levels have changed from the FY 2012 President's Budget request for PY or CY, briefly explain those changes:

FY12 funding reduced by FY12 appropriation adjustment and transferred to outyear requirements.

Section D: Acquisition/Contract Strategy (All Capital Assets)

Table I.D.1 Contracts and Acquisition Strategy

Contract Type	EVM Required	Contracting Agency ID	Procurement Instrument Identifier (PIID)	Indefinite Delivery Vehicle (IDV) Reference ID	IDV Agency ID	Solicitation ID	Ultimate Contract Value ($M)	Type	PBSA ?	Effective Date	Actual or Expected End Date
Awarded	6920	DTFAWA-03-C-00071									
Awarded	6920	DTFAWA-09-C-00073									

2. If earned value is not required or will not be a contract requirement for any of the contracts or task orders above, explain why:
NVS is a planning program and has yet to be baselined, hence Earned Value Management (EVM) is not implemented for the program at this time. Cost and schedule estimates will not be completed and baselined until JRC approval is received at the Final Investment Decision (FID).The NVS Program will employ a Performance Based Management System compliant with the ANSI/EIA Standard 748 - Earned Value Management System (EVMS) after the FID and baseline approval from the JRC. The Acquisition Strategy table includes two support contracts for requirements and investment analysis, and acquisition documentation. Both support contractors provide monthly reports including financial data. In FY12, a DME contract will be awarded and EVM will be required in accordance with FAA policies.

Exhibit 300B: Performance Measurement Report

Section A: General Information

Date of Last Change to Activities: 2012-06-26

Section B: Project Execution Data

Table II.B.1 Projects

Project ID	Project Name	Project Description	Project Start Date	Project Completion Date	Project Lifecycle Cost ($M)
1	Screening Information Request Prep and Release	Finalize System Specification; draft, review and release the SIR.			
2	Proposal Evaluation	Evaluation preparation, Evaluate Proposals and conduct Capability Assessment.			
3	Contract Award	Contract Award and Post Award Conference.			

Activity Summary

Roll-up of Information Provided in Lowest Level Child Activities

Project ID	Name	Total Cost of Project Activities ($M)	End Point Schedule Variance (in days)	End Point Schedule Variance (%)	Cost Variance ($M)	Cost Variance (%)	Total Planned Cost ($M)	Count of Activities
1	Screening Information Request Prep and Release							
2	Proposal Evaluation							
3	Contract Award							

Key Deliverables

Key Deliverables								
Project Name	Activity Name	Description	Planned Completion Date	Projected Completion Date	Actual Completion Date	Duration (in days)	Schedule Variance (in days)	Schedule Variance (%)
Project Name	Activity Name	Description	Planned Completion Date	Projected Completion Date	Actual Completion Date	Duration (in days)	Schedule Variance (in days)	Schedule Variance (%)
1	Screening Information Request (SIR) Preparation	Assess requirements, meet with stakeholders, draft the SIR	2011-11-30	2011-11-30	2011-11-25	125	5	4.00%
1	System Spec Preparation	Draft the System Specification	2011-12-15	2011-12-15	2011-12-15	140	0	0.00%
1	FY12 Engineering Analysis	Engineering Analysis to draft IRDs	2011-12-31	2011-12-31	2011-12-31	156	0	0.00%
1	System Spec Review and Release	Review the System Specification for completeness and accuracy, Spec released	2011-12-31	2012-01-11	2012-01-11	91	-11	-12.09%
1	SIR Review and Release	Review the SIR for completeness and accuracy, SIR released	2011-12-31	2012-01-11	2012-01-11	91	-11	-12.09%
2	Evaluation Preparation	Prepare for Proposal Evaluation	2012-02-28	2012-02-28	2012-02-28	211	0	0.00%
2	Proposal Evaluation	Evaluation of Proposals received in response to SIR	2012-08-31	2012-08-31		183	0	0.00%
2	Capability Assessment	Assess vendor capabilities	2012-08-31	2012-08-31		183	0	0.00%

Section C: Operational Data

Table II.C.1 Performance Metrics

Metric Description	Unit of Measure	FEA Performance Measurement Category Mapping	Measurement Condition	Baseline	Target for PY	Actual for PY	Target for CY	Reporting Frequency
NONE								